

We Claim:

1. A fiber splice device, comprising:
a body comprising a ductile material;
first and second end port sections located on opposite ends of said body
5 adapted to receive first and second optical fibers, respectively; and
a fiber splicing section, adapted to house a fiber splice, located on said body
between said end port sections, wherein said fiber splicing section includes a fiber
splice actuation section having a self-locking mechanism integral with said body.
2. The fiber splice device according to claim 1, further comprising:
10 a first hinge section to provide a hinge adapted to support a greater than 90
degree bend in the body;
a second hinge section to provide a hinge adapted to support a greater than 90
degree bend in the body; and
a bend region adapted to support an about 90 degree bend in the body.
- 15 3. The fiber splice device according to claim 1, wherein said body consists of a
single piece of metal.
4. The fiber splice device according to claim 1, wherein said end port sections
and said fiber splicing section are integral with said body.
5. The fiber splice device according to claim 2, wherein said fiber splicing section
20 comprises a central focus cam bar.
6. The fiber splice device according to claim 5, wherein said self-locking
mechanism comprises a reverse taper portion located on a portion of said body such
that when said body is bent about said first and second hinge sections and said bend
region, the reverse taper portion receives said central focus cam bar.
- 25 7. The fiber splice device according to claim 6, wherein said reverse taper portion
provides an opposing force to a force generated by said central focus cam bar.

8. The fiber splice device according to claim 5, wherein said self-locking mechanism comprises a raised bump on a surface of said body to receive said central focus cam bar and to retain a locked position of said central focus cam bar.
9. The fiber splice device according to claim 1, wherein the end port sections
5 provide torsional strain relief.
10. The fiber splice device according to claim 1, wherein the first and second end port sections receive first and second fibers having a buffer outer diameter of about 900 micrometers or less.
11. The fiber splice device according to claim 1, wherein the first and second end
10 port sections receive first and second fibers having a buffer outer diameter of approximately 250 micrometers or less.
12. The fiber splice device according to claim 1, wherein the first and second end port sections each include tube-shaped ports.
13. The fiber splice device according to claim 12, wherein at least one end port
15 includes an extension that protrudes from said body.
14. The fiber splice device according to claim 12, wherein at least one end port is adapted to be resizable to accommodate different-sized buffer coated optical fiber.
15. The fiber splice device according to claim 1, wherein the fiber splicing section includes a fiber receiving channel.
- 20 16. The fiber splice device according to claim 15, wherein the fiber receiving channel includes a conical portion and a V-groove.
17. The fiber splice device according to claim 15, wherein the fiber receiving channel includes a pre-grooved channel.

18. The fiber splice device according to claim 15, wherein the fiber receiving channel includes an index matching fluid.
19. The fiber splice device according to claim 5, further comprising an access hole disposed in said body across from said central focus cam bar adapted to receive a displacement mechanism to displace said central focus cam bar from a locked position.
20. The fiber splice device according to claim 5, further comprising clamp relief pads disposed on a surface of said body and adapted to contact a fiber clamping plate when actuated and to provide a gradual clamping force when the central focus cam bar applies a clamping force on the fiber clamping plate.
21. A method of making a fiber splice, comprising:
placing first and second optical fibers in first and second end port sections of a fiber splicing device such that ends of said fibers are butted to each other, the fiber splicing device further including a body comprising a ductile material, a fiber splicing section, adapted to house a fiber splice, located on said body between said end port sections, wherein said fiber splicing section includes a fiber splice actuation section having a self-locking mechanism integral with said body; and
engaging said fiber actuation section with the self-locking mechanism.
22. The method according to claim 21, further comprising crimping the surfaces of the first and second end port sections.